

**ODFW AQUATIC INVENTORY PROJECT
OREGON PLAN FOR SALMON & WATERSHEDS
STREAM RESTORATION HABITAT REPORT**

STREAM: Jackass Creek (W-271)
BASIN: Yamhill River
SURVEY TYPE: Pre-Tx
DATE: July 8, 2005
SURVEY CREW: Jeff Snyder, Kaylea Foster
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 6.0 km²
USGS MAPS: Midway
ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The Jackass Creek habitat survey extended 617 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 20.0. Land use for the reach was rural residential and agriculture. The average unit gradient was 2.5 percent. Riffles (59%) dominated stream habitat. Cobble (42%) and gravel (23%) dominated stream substrate. Wood volume was very low at 0.7 m³/100m.

COMMENTS:

There were no potential barriers to upstream fish migration in the surveyed length.

REACH 1

T06S-R08W-S10SE

REACH 1

Valley and Channel Summary

Valley Characteristics (Percent Reach Length)

<u>Narrow Valley Floor</u>		<u>Broad Valley Floor</u>	
Steep V-shape	0%	Constraining Terraces	100%
Moderate V-shape	0%	Multiple Terraces	0%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	20.0	VWI Range:	20 - 20

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	0%	Single Channel	0%
Bedrock	0%	Multiple Channel	0%
Terrace	100%	Braided Channel	0%
Alt. Terrace/Hill	0%		
Landuse	0%		

Channel Characteristics

<u>Type</u>	<u>Length (m)</u>	<u>Area (m2)</u>	<u>Dry Units</u>
Primary Channel	617	2,100	0
Secondary Channel	0	0	0
Off-Channel Units	0	0	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 5
Width: 3.4	Width: 5.7	7.5 (5.1 - 9)	20.8 (9.1 - 50)
Depth: 0.30	Height: 0.4	0.8 (0.6 - 1)	2.4 (1 - 4.65)

W:D ratio: 14.1

Entrenchment (ACW:FPW ratio): 1.3

Stream Flow Type: LF

Habitat Units/100m (total channel length): 6.3

Average Unit Gradient: 2.5%

Habitat Units/100m (primary channel length): 6.3

Water temperature (°C): 12.0 - 12.0

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	RR	AG
Riparian Vegetation:	D3	S

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	9%	Reach avg: 91%
Undercut Banks:	6%	Range: 53 - 100

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	23	3.7
Volume (m ³):	4	0.7
Key pieces (>=12m x 0.60m):	0	0.0

HABITAT INVENTORY

Report Date: 4/26/2006

Survey Date:

7/8/2005

REACH 1		T06S-R08W-S10SE					REACH 1					
HABITAT DETAIL												
Habitat Type	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m ²)	Large Boulders (#>0.5m)	Substrate Percent Wetted Area					
							S/O	Snd	Grvl	Cbl	Bldr	Bdrk
CASCADE/BOULDERS	2	41	4.5	0.30	185	180	0	0	10	38	53	0
GLIDE	1	18	4.0	0.25	72	2	5	23	27	36	0	9
POOL-LATERAL SCOUR	6	59	4.0	0.62	241	1	7	17	20	44	0	13
POOL-STRAIGHT SCOUR	2	18	2.5	0.40	47	0	5	20	38	38	0	0
POOL-TRENCH	1	18	4.0	0.50	72	0	0	0	5	0	0	95
RAPID/BEDROCK	3	58	4.0	0.12	229	0	0	0	10	0	0	90
RIFFLE	22	400	3.0	0.23	1,235	482	0	11	26	47	11	3
STEP/COBBLE	2	5	3.8	0.10	20	0	0	3	28	70	0	0
Total:	39	617	3.4	0.30	2,100	665	Avg: 2	11	23	42	9	13

HABITAT SUMMARY									
Habitat Group	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area		Large Boulders		
					(m ²)	Percent	Number	(# / 100m ²)	
Dammed & BW Pools	0	0			0	0.00%	0	0.0	
Scour Pools	9	95	3.7	0.56	360	17.12%	1	0.3	
Glides	1	18	4.0	0.25	72	3.43%	2	2.8	
Riffles	22	400	3.0	0.23	1,235	58.82%	482	39.0	
Rapids	3	58	4.0	0.12	229	10.91%	0	0.0	
Cascades	2	41	4.5	0.30	185	8.79%	180	97.6	
Step/Falls	2	5	3.8	0.10	20	0.93%	0	0.0	
Dry	0	0			0	0.00%	0	0.0	
Culverts	0	0			0	0.00%	0	0.0	

POOL SUMMARY			
	<u>Total</u>	Total of all Channel Lengths	Primary Channel Length
		<u># / Km</u>	<u># / Km</u>
All Pools:	9	14.6	14.6
Pools >=1m deep:	0	0.0	0.0
Complex pools (LWD pieces>=3):	0	0.0	0.0
Pool frequency (channel widths/pool):	12.1		
Residual pool depth (avg):	0.46		

OREGON DEPARTMENT OF FISH AND WILDLIFE
HABITAT INVENTORY

JACKASS CREEK PRE-TX
GCG: 8-W SITE ID: 271

Survey Date 7/8/2005

RIPARIAN ZONE

Report Date: 4/26/2006

VEGETATION SUMMARY

REACH 1

Summary of Riparian Zone (0-30m) 3 transects

Total hardwoods/1000	406
Total conifers/1000 ft	61
Total conifers >20" dbh/1000 ft	41
Total conifers >35" dbh/1000 ft	0

Average number of trees in a 5-meter wide band

Diameter class (cm)	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters		Zones 1-3 0-30 meters	
	Conifer	Hardwood	Conifer	Hardwood	Conifer	Hardwood	Conifer	Hardwood
3-15cm	0.0	4.0	0.0	1.0	0.0	0.0	0.0	5.0
15-30cm	0.3	0.0	0.0	0.3	0.0	0.7	0.3	1.0
30-50cm	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.7
50-90cm	0.7	0.0	0.0	0.0	0.0	0.0	0.7	0.0
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m2	1.0	4.7	0.0	1.3	0.0	0.7	0.3	2.2

Canopy closure and ground cover

	Zone 1 0-10 meters (%)	Zone 2 10 - 20 meters (%)	Zone 3 20 - 30 meters (%)
Canopy closure	39	2	2
Shrub cover	45	38	32
Grass/forb cover	55	60	68

Predominant landform in each zone

	Zone 1 0-10 meters (%)	Zone 2 10 - 20 meters (%)	Zone 3 20 - 30 meters (%)
Hillslope	0	0	0
High terrace	100	100	100
Low terrace	0	0	0
Floodplain	0	0	0
Wetland/meadow	0	0	0
Stream channel	0	0	0
Roadbed/Railroad	0	0	0
Riprap	0	0	0
Surface slope (%)	0	0	0

Summary of Riparian Zone (0-30m) for all reaches

3 transects

Summary of riparian zone (0-100 feet) extrapolated to 1,000 feet along stream

Total hardwoods/1000	406
Total conifers/1000 ft	61
Total conifers >20" dbh/1000 ft	41
Total conifers >35" dbh/1000 ft	0

Average number of trees in a 5-m wide band

Diameter class (cm)	Zones 1-3	
	<u>0-30 meters</u>	
	<u>Conifer</u>	<u>Hardwood</u>
3-15cm	0.0	5.0
15-30cm	0.3	1.0
30-50cm	0.0	0.7
50-90cm	0.7	0.0
>90cm	0.0	0.0

RIPARIAN ZONE VEGETATION

Reach 1

Reach 1

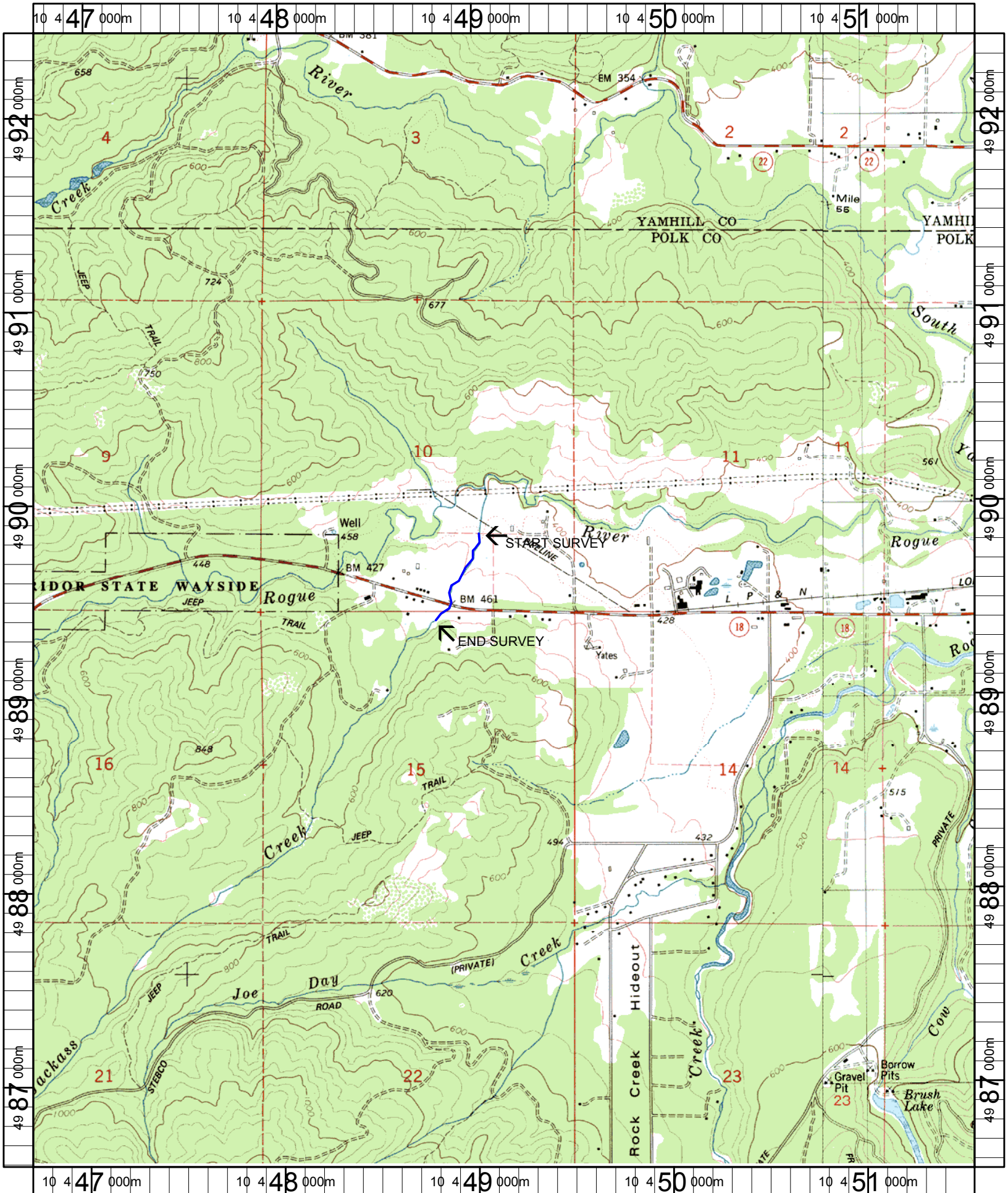
Unit	Side	Zone	Surface	Slope	Cover (percent)				Diameter class (cm)					Notes	
					Canopy	Shrub	Grass		3-15	15-30	30-50	50-90	>90		
9	RT	3	HT	0	0	0	100	Conifer							PASTURE
								Hardwood							
9	LF	1	HT	0	90	90	10	Conifer				1			
								Hardwood							
9	LF	2	HT	0	10	40	60	Conifer							BLACKBERRIES
								Hardwood							
9	LF	3	HT	0	10	30	70	Conifer							
								Hardwood		2					
9	RT	1	HT	0	75	40	60	Conifer					1		
								Hardwood	6			1			
9	RT	2	HT	0	0	30	70	Conifer							EDGE OF PASTURE
								Hardwood	3	1					
17	LF	2	HT	0	0	90	0	Conifer							BLACKBERRIES
								Hardwood							
17	LF	3	HT	0	0	90	10	Conifer							BLACKBERRIES
								Hardwood							
17	RT	1	HT	0	10	10	90	Conifer							
								Hardwood							
17	RT	2	HT	0	0	10	90	Conifer							PASTURE
								Hardwood							
17	RT	3	HT	0	0	0	100	Conifer							PASTURE
								Hardwood							
17	LF	1	HT	0	20	80	20	Conifer							
								Hardwood	6						
23	LF	1	HT	0	40	50	50	Conifer					1		
								Hardwood			1				
23	LF	2	HT	0	0	60	40	Conifer							PASTURE
								Hardwood							
23	LF	3	HT	0	0	70	30	Conifer							PASTURE
								Hardwood							
23	RT	1	HT	0	0	0	100	Conifer							RESIDENTIAL YARD EDGE
								Hardwood							
23	RT	2	HT	0	0	0	100	Conifer							RESIDENTIAL YARD
								Hardwood							
23	RT	3	HT	0	0	0	100	Conifer							RESIDENTIAL YARD
								Hardwood							

Comment Summary

Restoration Monitoring Sites 2005

MONITORING AREA: 8-W SITE ID: 271 JACKASS CREEK PRE-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	RI	00	9		PLASTIC PIPE IN CHANN	T = 12 C, 0448418, 4989711
6	LP	00	61			SALMON FRY
7	RI	00	86			CUTTHROAT TROUT
9	RI	00	113	BV	BV, ACW LARGER B/C ER	
10	LP	00	121			COHO FRY
11	RI	00	146		ROOT WAD CREATING P	ALSO SUBUNIT SIZED POOL
13	LP	00	183			COHO FRY
14	RI	00	208		BV	
19	RR	00	320			BEDROCK = HARDPAN
24	TP	00	389			COHO FRY
26	LP	00	417	/SS		BEDROCK = HARDPAN, COH
29	CB	00	481	BC, CS/CS	LOTS OF DEBRIS	BOULDERS, HWY 18 BRIDG
30	CB	00	497	CS/CS		BOULDERS
32	RI	00	532	SD		
33	SP	00	539			COHO FRY
36	LP	00	589			COHO FRY
38	LP	00	600.5			COHO FRY, T = 12 C
39	RI	00	616.5			END, 0448778, 4989395



Name: MIDWAY
 Date: 1/6/2005
 Scale: 1 inch equals 2000 feet

Location: 10 449146 E 4989496 N
 Caption: JACKASS CREEK RESTORATION SITE - YAMHILL BASIN